



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,102	09/26/2003	James A. Donovan	130139	7109

7590 07/19/2004

John S. Munday, Esquire
Law Offices of John S. Munday
PO Box 423
Isanti, MN 55040

EXAMINER

HOEY, ALISSA L

ART UNIT PAPER NUMBER

3765

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/672,102	Applicant(s) DONOVAN, JAMES A.	
	Examiner Alissa L. Hoey	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 6, 9-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuven (5,850,636) in view of Mitsumatsu et al. (US 2003/0185779).

Reuven provides a heatable outer cap having a water impervious outer surface and sized to fit over the hair of a person (figure 3, identifiers 24, 12 and 14: column 3, lines 51-55). A liner positioned inside the outer cap, having a fibrous texture and being sized to contact the hair of the person (figures 1 and 3, identifiers 10 and 14: column 4, lines 45-67). The cloth liner is made out of a natural or synthetic material (column 3, lines 52-56). There is a heatable gel sandwiched between inner and outer layers of the cap in a flexible container (figure 3, identifiers 22, 24, 30 and 32). The heatable gel along with the rest of the cap is nuked in the microwave to heat the article (column 4, lines 1-11). Further, Reuven provides the heatable gel placed proximate to the middle of the liner to provide heat to the cap.

However, Reuven fails to teach the heat source comprising a frangible container containing a quantity of supercooled liquid capable of releasing a pre-

Art Unit: 3765

determined amount of heat upon crystallization. A quantity of the crystal form of the liquid separated from the supercooled liquid and present in an amount sufficient to initiate crystallization of the quantity of supercooled liquid upon flexing the frangible container to cause the crystals to contact at least a portion of the supercooled liquid. The supercooled liquid is sodium acetate and crystallization cause the temperature of the solidifying liquid to reach a temperature of 130 degrees F.

Mitsumatsu et al. provides a hair cap used with hair compositions such as a conditioner and having a heat source (paragraph 43). The heat source comprising a frangible container containing a quantity of supercooled liquid capable of releasing a pre-determined amount of heat upon crystallization (claims 51, 55, 56 and 60-63). A quantity of the crystal separated from the supercooled liquid and present in an amount sufficient to initiate crystallization of the quantity of supercooled liquid upon flexing the frangible container to cause the crystals to contact at least a portion of the supercooled liquid (claims 60-68). The supercooled liquid is sodium acetate and crystallization cause the temperature of the solidifying liquid to reach a temperature of 130 degrees (paragraph 263).

It would have been obvious to have provided the heatable cap of Reuven with the cap heat source of Mitsumatsu et al., since the disposable cap of Reuven provided with the heat source capable of being activated without any additional means besides a user's hand to break the frangible container makes the cap self sufficient. Having a cap with heat capabilities without using any

Art Unit: 3765

electricity allows the wearer to use to cap in instances where no electricity is available.

3. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuven and Mitsumatsu et al. as applied to claims 1 and 9 above, and further in view of Kimura (US 4,725,462).

Reuven and Mitsumatsu et al. fail to teach a temperature sensitive portion on the cap to indicate the temperature of the cap after heating. Kimura provides a temperature sensitive indicia (10) to be applied to textile garments indicating the temperature of a garment (column 2, lines 20-55).

It would have been obvious to have provided the heatable cap of Reuven and Mitsumatsu et al. with the temperature sensor of Kimura, since the heatable cap of Reuven and Mitsumatsu et al. having a temperature sensor would allow the user to know when the temperature of the cap goes from pre-heated to heated so it can then be donned on the user's head.

4. Claims 7, 8, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuven and Mitsumatsu et al. as applied to claims 1 and 9 above, and further in view of Skiba et al. (US 6,047,706).

Reuven and Mitsumatsu et al. fail to teach the liner including a quantity of hair cleaning compound consisting of a conditioner (column 3, lines 13-17).

It would have been obvious to have provided the heatable cap of Reuven and Mitsumatsu et al. with the cleaning compound on the liner of Skiba et al., since the cap of Reuven and Mitsumatsu et al. having the conditioner compound

Art Unit: 3765

located on the liner provides a cap with all the supplies needed to deep condition a user's hair without having to buy or use anything additional.

Allowable Subject Matter

5. Claims 17-20 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

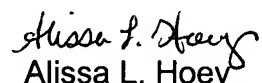
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alissa L. Hoey whose telephone number is (703) 308-6094. The examiner can normally be reached on M-F (8:00-5:30)Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (703) 305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alissa L. Hoey
Patent Examiner
Technology Center 3700